

Description and application

The BAC-5801 and BAC-5802 are native BACnet, fully programmable, direct digital controllers. Use these versatile general purpose controllers in stand-alone environments or networked to other BACnet devices. As part of a complete facilities management system, the BAC-5801 and BAC-5802 controllers provide precise monitoring and control of connected points.

- ◆ BACnet MS/TP compliant
- ◆ Automatically assigns the MAC address and the device instance
- ◆ Easy to install, simple to configure, and intuitive to program
- ◆ Controls room temperature, humidity, fans, monitors refrigeration, lighting, and other building automation functions.

Specifications

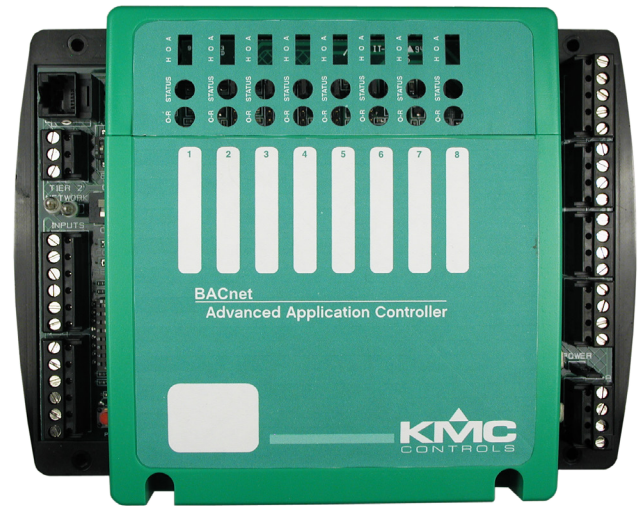
Inputs

- ◆ 8 universal inputs, each of which is programmable as an analog, binary, or accumulator object. Accumulators limited to three per controller.
- ◆ Standard units of measure
- ◆ Pull-up resistors for switch contacts and other unpowered equipment. Switch selects none or 10K ohms.
- ◆ Removable screw terminal blocks, wire size 14–22 AWG
- ◆ 10-bit analog-to-digital conversion
- ◆ Pulse counting to 16 Hz
- ◆ 0–5 volts DC analog input range
- ◆ Overvoltage input protection
- ◆ Compatible with KMD-1160 and KMD-1180 series NetSensors

Outputs

- ◆ 8 universal outputs, each of which is programmable as an analog or binary object
- ◆ Standard and custom units of measure
- ◆ Slots for HPO-6700 series output override boards
- ◆ Removable screw terminal blocks, wire size 14–22 AWG
- ◆ 0–10 volts DC for analog objects
- ◆ 0 or 12 volts DC for binary objects
- ◆ Short-protected outputs, output current limited to 100 mA per output or 350 mA total

Specifications based on firmware 2.0. Specifications and design subject to change without notice.



Still... Made in the U.S.A.

Programmable features

- ◆ 10 Control Basic program areas
- ◆ 40 analog and 40 binary value objects
- ◆ Real time clock with power backup for 72 hours (BAC-5801 only)
- ◆ 8 PID loop objects
- ◆ See PIC statement for supported BACnet objects

Schedules

- ◆ 8 Schedule objects
- ◆ 3 Calendar objects

Alarms and events

- ◆ Supports intrinsic reporting
- ◆ 8 Notification class objects

Trends

- ◆ 8 Trend objects

Memory

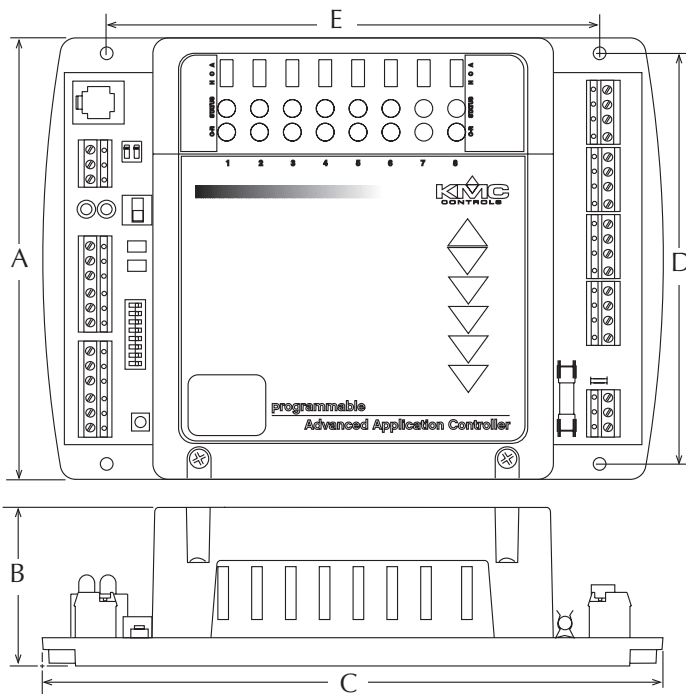
- ◆ Programs and program parameters are stored in nonvolatile memory
- ◆ Auto restart on power failure

Communications

- ◆ MS/TP operating at up to 76.8 kilobaud (network connections are supervised in smoke control applications)
- ◆ Automatically assigns MAC addresses and device instance numbers
- ◆ Modular jack for NetSensor connection (5 VDC at 25 mA typical)

Specifications ((continued))

Dimensions



A	B	C	D	E
5.38 in.	1.98 in.	7.55 in.	5.0 in.	6.0 in.
137 mm	50 mm	192 mm	127 mm	152 mm

Installation

Supply voltage

24 volts AC (-15%, +20%), 50-60 Hz, 36 VA, Class 2 only, non-supervised (all circuits, including supply voltage, are power limited circuits)

Weight 14 ounces (395 g)

Case material Green and black flame retardant plastic

Environmental limits

Operating 32 to 120° F (0 to 49° C)
 Shipping -40 to 140° F (-40 to 60° C)
 Humidity 0-95% RH (non-condensing)

Regulatory

- ◆ FCC Class B, Part 15, Subpart B
- ◆ BACnet Testing Laboratory listed
- ◆ CE compliant
- ◆ UL 916 Energy Management Equipment listed
- ◆ UL 864 Smoke Control Equipment listed (UUKL) (for smoke control applications, see Smoke Control Manual For BACnet Systems, P/N 000-035-08)
- ◆ SASO PCP Registration KSA R-103263

Software compatibility

Requires the current version of BACstage or TotalControl for full configuration and programming features.

Accessories

Connectors and fuses

- 902-602-04 Replacement three-pin removable terminal block
- 031-602-02 Replacement four-pin removable terminal block
- 883-602-17 Replacement six-pin removable terminal block
- 902-600-04 Replacement fuse, 1.0 A, fast acting, 5 x 20 mm
- HPO-0054 Replacement fuse bulb
- HPO-0063 Replacement two-pin jumper

Enclosure

- HCO-1102 Steel control enclosure, 10.1 W x 2.4 H x 7.1" D (257 x 62 x 181 mm)

NOTE: For smoke control applications, the controller must be mounted in a UL Listed FSCS enclosure or listed enclosure with minimum dimensions—see Smoke Control Manual For BACnet Systems (P/N 000-035-08)

Output override boards (HPO-6700 series)

NOTE: See the (P/N 902-035-10) HPO-6700 series data sheet (only the HPO-6701/6704 boards are approved for smoke control applications)

Power transformers

- XEE-6111-40 Transformer, 120-to-24 VAC, 40 VA, single-hub
- XEE-6112-40 Transformer, 120-to-24 VAC, 40 VA, dual-hub
- XEE-6112-100 Transformer, 120-to-24 VAC, 96 VA, dual-hub (required in smoke control applications)

Models

- BAC-5801 Controller with real-time clock
- BAC-5802 Controller w/o real-time clock



KMC Controls, Inc.

19476 Industrial Drive, New Paris, IN 46553
 574.831.5250
www.kmcccontrols.com; info@kmcccontrols.com

MS/TP automatic MAC addressing is protected under United States Patent Number 7,987,257.